Claims

1. A method of extracting two-dimensional image shapes from a two-dimensional array of pixel data, the method comprising the steps of:

selecting intensity vs. pixel information in at least one direction in the vicinity of an edge of the image shape;

recognizing scans with sufficient contrast as containing edge information;

subjecting acceptable scans to an edge detection algorithm;

detecting the edge location; and

generating a locus of points that define the two-dimensional shape of the image from the detected edge values.

2. A method according to Claim 1, wherein the edge detection algorithm is a user defined edge detection algorithm that is tailored to the application.

3. A method according to Claim 1, wherein the selecting step includes the step of selecting intensity vs. pixel information in a plurality of directions in the vicinity of an edge of the image shape.

4. A method according to Claim 3, wherein the selecting step includes the step of selecting intensity vs. pixel information in at least four directions.

5. A method according to Claim 1, wherein said at least one direction is normal to the approximate edge location.

6. Apparatus for extracting two-dimensional shape information from an image, of a submicron structure, formed on an array of detectors, comprising:

means for determining intensity vs. detector location information for detectors on at least one scan in at least one direction in the vicinity of an edge of the image;

means for processing identified scans according to an edge detection algorithm to identify points on the edge of the image; and

means for generating a locus of points that define the two-dimensional shape of the structure from the identified edge points.

7. Apparatus according to Claim 6, wherein the edge detection algorithm is a user defined edge detection algorithm that is tailored to the application.

8. Apparatus according to Claim 6, wherein the selecting means includes means for selecting intensity vs. pixel

information in a plurality of directions in the vicinity of an edge of the image shape.

9. Apparatus according to Claim 8, wherein the plurality of directions includes at least four directions.

10. Apparatus according to Claim 6, wherein said at least one direction is normal to an approximate edge location.

11. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for extracting two-dimensional image shapes from image data on a pixel array, the method steps comprising:

selecting intensity vs. pixel information in at least one direction in the vicinity of an edge of the image shape;

recognizing scans with sufficient contrast as containing edge information;

subjecting acceptable scans to an edge detection algorithm;

detecting the edge location; and

generating a locus of points that define the two-dimensional shape of the image from the detected edge values.

12. A program storage device according to Claim 11, wherein the edge detection algorithm is a user defined

edge detection algorithm that is tailored to the application.

13. A program storage device according to Claim 11, wherein the selecting step includes the step of selecting intensity vs. pixel information in a plurality of directions in the vicinity of an edge of the image shape.

14. A program storage device according to Claim 13, wherein the selecting step includes the step of selecting intensity vs. pixel information in at least four directions.

15. A program storage device according to Claim 11, wherein one of the directions is normal to an approximate edge location.